

REMARKS

This Amendment and Response is filed in response to the Final Office Action mailed on Feb. 19, 2009 and the Advisory Action mailed on August 19, 2009. This Amendment and Response is also filed in connection with a Petition for Revival of an Application for Patent Abandoned Unintentionally under 37 CFR 1.137(b) and a Request for Continued Examination filed herewith. Please consider the above-identified patent application in view of the amendments and remarks provided herein.

Claims 1, 15, and 22 are amended herein, no claims are canceled, and claims 29-34 are newly added; as a result, claims 1, 3-7, 15, 17-22, and 24-34 are pending in this application. The fee for the added claims was previously paid in full.

Examiner Interview Summary

The Applicant would like to thank Examiner Ben C. Wang for the courtesy of a phone interview conducted on March 3, 2009 and March 4, 2009 between the Examiner and the Applicant's representative, Jim H. Salter. During the interviews, the priority claim made in the present application was discussed. This Amendment is responsive to the Final Office Action and the matters discussed during the interviews.

Objection to the Specification

The specification was objected to for a particular informality. Claims 1, 15, and 22 have been amended herein to correct the noted informality. The Applicants therefore respectfully request withdrawal of the specification objection.

§103 Rejections of the Claims

Claims 1, 3, 5, 7, 15, 17, 19, 21-22, 24, 26, and 28 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Lehman, et al. (U.S. 4,796,179, hereinafter, "Lehman") in view of Gauthier et al., "Automatic Generation and Targeting of Application Specific Operating Systems and Embedded Systems Software", 2001, IEEE (hereinafter 'Gauthier'), and further in view of Liu et al., 'Timed Multitasking for Real-Time Embedded Software', Feb. 2003, IEEE

(hereinafter, ‘Liu’), and further in view of Kuljeet Singh *‘Design and Evaluation of an Embedded Real-time Micro-kernel’*, October 2002, pp. 1-133, Virginia Polytechnic Institute and State University (hereinafter ‘Singh’).

Claims 4, 18, and 25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Lehman, in view of Gauthier, Liu, Singh, and further in view of Xu et al., “On Satisfying Timing Constraints in Hard-Real-Time Systems”, 1991, ACM (hereinafter ‘Xu’).

Claims 6, 20, and 27 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Lehman, in view of Gauthier, Liu, Singh, Xu, further in view of D. Lake (US 2004/0045003A1) (hereinafter ‘Lake’).

Applicant respectfully submits that the Office Action did not make out a *prima facie* case of obviousness, because even if combined, the cited references fail to teach or suggest all of the claim limitations of the independent claims of the present Application.

Cited References Gauthier and Liu Should be Withdrawn as Not Being Prior Art

As argued in the response to the non-final Office Action mailed on Sep. 11, 2008, the Applicant presented clear evidence that the present application is a continuation-in-part patent application claiming priority to U.S. Patent Application Serial No. 09/309,147; filed May 10, 1999 by the same inventor, Robert Zeidman, as the present application. The parent priority U.S. Patent Application Serial No. 09/309,147 has since issued as U.S. Patent No, 6,934,947 (herein the ‘947 patent).

In the Final Office Action mailed on Feb. 19, 2009, the Examiner continued to reject the Applicant’s proper priority claim. In particular, the Examiner argued as follows on pages 2-3 of the Final Office Action:

Claiming the Benefit of an Earlier Filing [sic] Data

2. If the later-filed application is a utility or plant application filed on or after November 29, 2000, the reference to the prior-filed application must be submitted within the time period set forth in 37 CFR 1.78(a) (e.g., during the pendency of the later-filed application and within the later of 4 months from the actual filing date of the later-filed application or 16 months from the filing date of the prior-filed application) for a benefit claim under 35 U.S.C. 120, 121, or 365(c), and also for benefit claim under 35 U.S.C. 119(e) (See MPEP § 201.11, condition (E)) The applicant prior-filed application (copending U.S. patent application serial number 09/309,147) was filed on May 10, 1999. And, subsequently, the pending application was filed on October 20, 2003. The time period for the later filing (dated December 5, 2008) to claim the benefits of the continuation-in-part application (copending application No. 09/309,147) is beyond 4 months from the actual filing date (filed October 20, 2003) of the later-filed application. Further, the time period is more than 16

months from the filing date of the prior-filed application (filed May 10, 1999) to the later filing (dated December 5, 2008) to claim the benefits of the above copending application (emphasis added)

Therefore, the existing prior arts applied in the previous Office Action are still applied to the current Office Action.

The Examiner used the basis explained above to reject the present application again and to support the finality of the Feb. 19, 2009 Final Office Action. Note that the Final Office Action makes no mention of the coverage of the pending claims relative to the disclosure in the '947 patent or the disclosures in the cited references Gauthier and Liu. Rather, the basis for the finality of the Feb. 19, 2009 Office Action rested solely on the Examiner's groundless assertion that the Applicant had claimed priority too late.

On March 18, 2009, the Applicant filed an Amendment and Response under 37 CFR 1.116. The Applicant's Amendment was responsive and dispositive of the Examiner's assertion that the Applicant had claimed priority too late. The Applicant requested reconsideration and withdrawal of the finality of the rejections in the Feb. 19, 2009 Office Action.

In response to the Applicant's March 18, 2009 filing, the Examiner mailed an Advisory Action on the last day of the statutory period for response. In the Advisory Action mailed on August 19, 2009, the Examiner admits that the priority claim made in the present application properly establishes that the present application is a continuation-in-part drawing priority to the '947 patent. However, in the Advisory Action, the Examiner newly introduces the argument that several specific limitations of the currently pending claims are not fully disclosed in the '947 patent and therefore not entitled to the priority date of the '947 patent. Given that the Advisory Action was mailed on the last day of the statutory period for response, there was no chance for the Applicant to respond to the Examiner's newly presented arguments within the statutory period for response.

Nevertheless, the Applicant hereby submits a Petition for Revival of an Application for Patent Abandoned Unintentionally under 37 CFR 1.137(b). The Applicant also hereby submits the arguments herein, which are fully responsive to the Feb. 19, 2009 Final Office Action and the August 19, 2009 Advisory Action. The Applicant again respectfully requests that the Gauthier and Liu references be withdrawn

as prior art references from the present application as these references post-date the proper priority date of the present application and the priority patent supports the corresponding claim elements. The claim elements rejected under Gauthier and Liu are fully supported by the disclosure in the '947 patent and therefore rejections based on the Gauthier and Liu references are improper.

In particular, the priority patent (the '947 patent) supports the corresponding claim elements alleged to be taught by Gauthier and Liu. These elements are admittedly absent from Lehman and Singh. Specifically, the Final Office Action at page 5 states:

However, in an analogous art of '*Automatic Generation and Targeting of Application Specific Operating Systems and Embedded Systems Software*', Gauthier discloses synthesizing source code (e.g., Sec. 4.2 - Synthesis of Application Specific OS and SW targeting) from commands embedded in source code.

Currently pending claim 1 includes the following elements:

synthesizing source code from commands embedded in source code to implement the task scheduler that uses said scheduling algorithm for controlling execution of said set of n tasks, ...; (referred to herein as element A)

Pending claims 15, 22, and 29 have similar elements. The '947 patent, as a priority document for the present application, provides support for these claim elements alleged to be taught by Gauthier. For example, see the '947 patent at col. 4, lines 26-49. This portion of the priority patent is set forth below:

FIG. 5 shows dialog box 500 of the graphical user interface. As shown in FIG. 5, in section 501 of dialog box 500, the user is queried to provide a list of tasks to be included by the code synthesizer to create synthesized code of the polling loop that can be compiled. At section 502 of dialog box 500, the user is queried to provide a list of files to be included by the code synthesizer to create synthesized code of the polling loop that can be compiled. At section 503, the user is queried for directives to a compiler that are necessary to configure the compiler to create the executable code from the synthesized code. Respectively, at sections 504-507, the user is queried to provide identifying and descriptive information to be included in a comment header of the synthesized code: (a) a project name; (b) the author's name; (c) some comments to be included; and (d) any other descriptive information. Upon completing dialog box 500 (i.e., after the user provides the requested information and selects the "OK" button 508), the synthesized code is created by (a) creating a main polling loop that manages the tasks, and (b) replacing all of the VIRTOS commands by actual code that would execute the intended function of the replaced VIRTOS commands. If the user selects "CANCEL" button 509, the operation is aborted, and no directive would be generated for code synthesis. ('947 patent, col. 4, lines 26-49)

This portion of the '947 patent, inter alia, fully supports and enables the claim

element A as included in the pending claims and allegedly taught by Gauthier. As explained above, the '947 patent pre-dates the Gauthier reference. Thus, it is improper to rely on Gauthier to reject claims including these elements supported by a disclosure in a prior-filed priority document.

The Final Office Action at page 7 further states:

However, in an analogous art of *Timed Multitasking for Real-Time Embedded Software*, Liu discloses specifying t init-tasks that are executed only once upon initial execution of a task scheduler, t being less than or equal to n.

Currently pending claim 1 also includes the following elements:

specifying t init-tasks that are executed only once upon initial execution of a task scheduler, t being less than or equal to n...; (referred to herein as element B)

Pending claims 15, 22, and 29 have similar elements. The '947 patent, as a priority document for the present application, also provides support for these claim elements alleged to be taught by Liu. For example, see the '947 patent at col. 3, lines 24-31. This portion of the priority patent is set forth below:

As shown in FIG. 3, VIRTOS queries the user to provide (a) a task name (301), and (b) a subroutine type (302). In this embodiment, four subroutine types are supported: (a) COMMON subroutine, (b) INIT task; (c) LOOP task and (d) ISR task. A COMMON subroutine performs a specified function, and can be called from the other subroutines or tasks. An INIT task is a subroutine which is called once by the task management code to initialize a LOOP task or an ISR task. ('947 patent, col. 3, lines 24-31)

This portion of the '947 patent, inter alia, fully supports and enables the claim element B as included in the pending claims and allegedly taught by Liu. As explained above, the '947 patent pre-dates the Liu reference. Thus, it is improper to rely on Liu to reject claim elements supported by a disclosure in a prior-filed priority document.

In the August 19, 2009 Advisory Action, the Examiner asserts that the following elements of claim 1 are not fully covered by the disclosure in the '947 patent and therefore claims 1, 15, and 22 are not entitled to the priority date of the '947 patent:

1. specifying a set of n tasks, task(1) through task(n), to be scheduled for execution, each task having an associated task control block;
2. specifying a scheduling algorithm for scheduling the execution of said set of n tasks;
3. manipulate[ing] task control blocks for said set of t init-tasks.

However, the Advisory Action fails to address the Applicant's previously submitted assertions that at least the elements A and B detailed above are: 1) included in the currently pending claims, 2) rejected under Gauthier or Liu, and 3) disclosed in the priority patent. As such, it does not matter that other elements of the pending claims may or may not be disclosed in the priority patent. The fact remains that claimed elements disclosed in the priority patent are being improperly rejected based solely on post-dated references (i.e., Gauthier and Liu). Therefore, the Examiner's assertions with respect to the three elements listed above are irrelevant and moot.

Again, the Applicant respectfully requests that the Liu and Gauthier references be withdrawn as prior art references from the present patent application as these references post-date the proper priority date of the present application and the priority patent supports the corresponding claim elements. Because the Feb. 19, 2009 Final Office Action based its rejections primarily on the Liu and Gauthier references, the Applicant respectfully submits that the remaining cited references do not render obvious the claims as presented. Therefore, the Applicant respectfully requests withdrawal of the §103(a) rejections.

Request for Entry of New Claims

The Applicant has added new claims 29-34 by this Amendment. The fee for the added claims was previously paid in full. These new claims are not anticipated or rendered obvious by the art currently of record for the reasons set forth in prior amendments with respect to claims 1, 15, and 22.

Therefore, the Applicant respectfully submits that for at least the reasons set forth above and previously submitted, the pending claims are patentable over the properly applied art of record. The Applicant respectfully requests withdrawal of the outstanding claim rejections and allowance of the pending claims.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney, Jim H. Salter at 408-406-4855 to facilitate prosecution of this application.

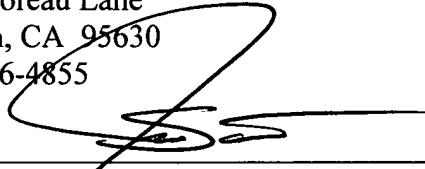
Respectfully submitted,

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Date October 13, 2009

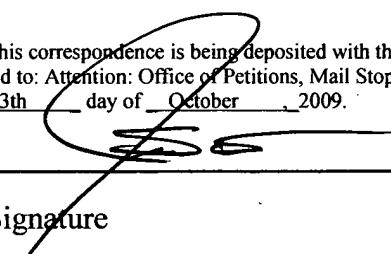
By 

Jim H. Salter
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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Attention: Office of Petitions, Mail Stop Petitions, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 13th day of October, 2009.

Jim H. Salter

Name


Signature